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08/991,113	12/16/1997	ALGIRDAS A. UNDERYS	FINKL-183-US	2118

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JAMES G. STAPLES ESQ  
A. FINKL & SONS CO  
2011 NORTH SOUTH PORT AVENUE  
CHICAGO, IL 60614

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 35

Application Number: 08/991,113  
Filing Date: December 16, 1997  
Appellant(s): UNDERYS, ALGIRDAS A.

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James G. Staples  
For Appellant

**EXAMINER'S ANSWER**

- (1) This is in response to the appeal brief filed April 21, 2003, with Supplemental Brief filed May 12, 2003.
- (2) *Real Party in Interest*

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A statement identifying the real party in interest is contained in the brief.

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 4, 6, 7, 15, 16 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting, and not under 35 U.S.C. 112 first paragraph, as stated on page 1 of Appellant's Brief. The remainder of Appellant's statements in the "Status of Claims" section of the Brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 4 and 19 do not stand or fall together with claims 6, 7, 15 and 16 and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

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**(8) Claims Appealed**

The copy of the appealed claims contained in the Attachments to the brief is correct. Copies of claims 6, 7, 15 and 16 are presented as Attachment 4 of the main brief, and copies of claims 4 and 19 are attached to the Supplemental Brief.

**(9) Prior Art of Record**

4,450,876	McGinty	9-1985
4,620,884	Heath	11-1986
6,398,885	Finkl et al.	6-2002

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

a) Claims 6, 7, 15, and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the '885 claims and the present claims are drawn to methods for treating tool steel blocks by placing same in a mounting apparatus subjected to the effects of infrared radiation, preferably from a tungsten halogen lamp (see '885 claim 6), and in an ambient atmosphere (see the "subjecting" step of '885 claim 1). The difference between the instant claims and the '885 claims is that the '885 claims recite a number of limitations which are not recited in the instant claims. However, none of these limitations are inconsistent with the presently claimed process, and it appears that if one carries out any process as defined in the '885 claims, then one necessarily also carries out a process as defined by the present claims.

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Consequently, no patentable distinction is seen between the presently claimed process and that of the '885 patent.

b) Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885 in view of either McGinty (U.S. Patent 4,540,876) or Heath (U.S. Patent 4,620,884).

The claims of the '885 patent do not recite the reflective surface as recited in instant claim 4. Both McGinty and Heath indicate that it was well-known in the art at the time of the invention to employ reflective surfaces in infrared treatment furnaces; see McGinty claim 1, lines 2-4 or Heath column 4, lines 1-5. These disclosures would have rendered it obvious to one of ordinary skill in the art to utilize the presently claimed reflective surfaces when performing the process according to the '885 claims.

c) Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885 in view of McGinty.

The '885 claims define a process which includes heat treating a tool steel workpiece by the effects of a source of infrared energy, but do not recite the specific reflective material as set forth in the instant claim. McGinty column 3, lines 36-38 indicate that it was conventional in the art at the time of the invention to employ gold plated reflective walls in infrared heat treatment

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processes. Consequently, to use such a surface in the process as defined by the '885 claims would have been considered an obvious expedient by one of ordinary skill in the art.

**(11) Response to Argument***(A) Administrative matters*

On pages 4-8 of the Brief, Appellant gives a detailed timeline as to the filing of a parent of the case that matured into the '885 patent (January 1996), the present application (December 1997), and the CIP application which matured into the '885 patent (September 1998). Appellant correctly notes that there is no reference to infrared heating in the earliest application (the January 1996 application). Thus, the examiner agrees that the present claims could not have been filed in the earliest application, and that therefore the present application should be considered the "earlier filed" application and the September 1998 application the "later-filed" application for purposes of determining the proper standard of whether one-way or two-way obviousness need be shown in making an obviousness-type double patenting rejection. MPEP section 804 (see page 800-23 as revised August 2001) states in relevant part that in such a case, only a one-way determination is needed "in the absence of a finding of...administrative delay on the part of the Office causing delay in prosecution of the earlier filed application...." The facts of the present case do not indicate any administrative delay, but rather that any delay and the necessity for the present rejection are a result of Appellant's actions in this application.

First, in response to the Final rejection mailed May 27, 1999, Appellant made three unsuccessful attempts to place the case in condition for allowance, resulting in three Advisory Actions, before unintentionally allowing the period for reply to expire and Abandonment to

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occur. Then, Appellant successfully petitioned that the present application be revived under 37 CFR 1.137(b); see Paper no. 14. Thus, at least a part of any delay in this application must be attributed to Appellant.

More importantly, note that the Amendment filed by Appellant in March 2002 (Paper no. 23) successfully removed all grounds of rejection pending at that time, leaving only obviousness-type double patenting rejections to be made. Had this amendment been filed at any time prior to a Notice of Allowability in the September 1998 application which matured into the '885 patent, no grounds of rejection would have been remaining and the present claims would have issued. The Notice of Allowability in the '885 patent was issued in December 2001. Thus, if Appellant had submitted the Amendment of March 2002 at any time during the nearly two-year period between December 1999 (when the original Notice of Appeal was filed in the present application) and December 2001 (when a Notice of Allowability was issued in the "later-filed" application), no double patenting issue would have been raised, and no rejections would have been pending with respect to the appealed claims.

Thus, it is the examiner's position that:

- 1) No reasonable case can be made for administrative delay in the present application.
- 2) In the absence of Appellant's delay, no grounds of rejection would be applicable to the appealed claims.
- 3) The proper standard for determining obviousness of the appealed claims vis-à-vis the '885 claims is a one-way test, i.e. would the invention as defined in the appealed claims have been obvious in view of that defined in the '885 claims.

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*(B) The '885 claims versus the instant claims*

Turning now to the merits of the rejection, and Appellant's arguments in the Brief, Appellant alleges that one should read the term "heat treatment furnace" in the appealed claims as describing a type of furnace not analogous to the "electrical source of heat" in the '885 claims. In response, the examiner's position is that the only claimed limitation regarding the furnace is that it be "of a size suitable to receive a tool steel workpiece to be heat treated" (Appealed claim 15, ll. 2-3), and that it contain a source of infrared heat energy. The appealed claims further require that one subject a workpiece to heat treatment by exposing the workpiece to infrared heat energy from that energy source. Comparing this to the '885 claims, the patented claims recite treating a portion of a die block "by subjecting it to an electrical source of heat ('885 claim 1, lines 20-21), with patented claim 5 stating that the electrical source of heat is infrared heating means. This limitation is considered by the examiner to be equivalent to the "subjecting" step of appealed claims 15 or 19. Patented claim 6 states that the infrared heating means are tungsten halogen lamps arranged to direct infrared energy to that portion of the block. This limitation is considered by the examiner to be equivalent to the "subjecting" step of appealed claim 16. Nothing in the appealed claims limits the process to any particular physical furnace design, as alleged by Appellant on page 10 of the Brief.

Next, Appellant compares a treatment of a two inch depth portion of a block, as done in the '885 claims, to a treatment of an entire workpiece, as done in the appealed claims. The examiner's position is that no patentable distinction is raised by this difference because clearly one of ordinary skill in the heat treatment art would recognize that only portion or portions of a material that are actually subjected to the effects of heat will in fact be heat treated. The



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“workpiece” subjected to this treatment in the appealed claims appears to be an entire piece of tool steel. The equivalent “workpiece” in the ‘885 claims is a two inch deep section, i.e. the section that is subjected to the effects of the electrical heat. Whatever portions of a specific piece of material are subjected to the heat are, for all practical purposes, the “workpiece” of a heat treatment process. Such would include the present case in which the portion may comprise an entire tool steel block.

On pages 11-16 of the Brief, Appellant alleges that the physical objects worked on or their starting condition are different in the claimed invention than in the ‘885 process, that the extent of the physical involvement of those objects in the respective processes are different, that the treatments applied are different in the ‘885 claims than in the claimed process, that the environments used in the two processes are different, and/or that the final products of the two processes are different. Appellant’s arguments have been carefully considered, but are not persuasive of patentability because:

a) In both the appealed claims and in the ‘885 claims, the objects being treated may be a steel block, i.e. the preamble of independent claims 15 and 16 refer to treatment of a “block”, and the ‘885 claims are drawn to treatment of a shank portion of a die block. (Instant claim 19 is not as specific as to the material being treated other than stating that it is a “tool steel workpiece”). As stated supra, the examiner is considering whatever part of a particular material that is actually subjected to heat to be a workpiece for a given heat treatment operation, whether that part is a whole block or merely a portion thereof.

b) Appellant alleges that the hardness of at least a portion of the materials treated in the ‘885 process is different from that of the process of the appealed claims. However, the examiner

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notes that the appealed claims contain no limitations upon the hardness of the materials being treated, either prior to or subsequent to heat treatment. Thus no patentable distinction is seen in this aspect of the invention versus that claimed in the '885 patent.

c) With regard to the extent of physical involvement, Appellant again alleges that the treatment of a specified portion of a material is distinct from a treatment of an entire block as done in the process of the appealed claims. As set forth above, clearly one of skill in the art would recognize that only the portion(s) of metal objects which are actually located in a heat treatment furnace or zone subject to the effects of heat would undergo any significant heat treatment, whether in the process as claimed or that as claimed in the '885 patent.

d) With regard to the treatment applied, Appellant refers to the statement in '885 claim 1 that all but the treated portions of the metal are subjected to ambient conditions and atmosphere. This is true in any physical or chemical process, i.e. in the absence of any deliberate effort to the contrary, the conditions and atmosphere will inherently be "ambient". Therefore, no patentable distinction is seen between a treatment as applied in the appealed claims, in which a workpiece to be heat treated is in some undefined type of furnace atmosphere (specifically an air atmosphere in appealed claim 7), and a treatment as in the '885 claims in which portions that are not heat treated are in an ambient atmosphere. If any portion of a block would exist in the process of the appealed claims that is not actually in the furnace, it too would be in an ambient atmosphere.

e) A similar situation exists with regard to the environments of the respective heat treatments, i.e. only the treated portions are subjected to a very high temperature or non-ambient condition. This would be true in either the '885 process or that of the claims on appeal.

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f) As to the final products, Appellant alleges that the final products of the '885 process possess two zones of hardness as compared to those processed in the claims on appeal. In response, the examiner notes that nothing in the appealed claims defines or limits the hardness of the workpiece or any portion thereof, either before or after treatment.

Finally, Appellant alleges on pages 19-20 of the Brief that the McGinty and Heath patents, used in the rejections of appealed claims 4 and 19, are drawn to non-analogous art and thus not properly combinable with the claims of the '885 patent. Specifically, appellant alleges that the disclosures of these patents are drawn to treatment of thin sections of wires or wafers and not to treatment of thick sections as done in '885. In response, the examiner notes that the sole purpose to citing the McGinty and Heath patents is to establish that it was well-known in the art, at the time of the invention, to employ the particular reflective surfaces as defined in appealed claims 4 and/or 19 in infrared treatment furnaces. These reflective surfaces would be expected by one of skill in the art to serve the same function of reflecting heat within a furnace, regardless of the size or shape of the material being treated. Appellant's arguments are particularly irrelevant to appealed claim 19, which does not specify any size or shape of the material undergoing treatment. With respect to appealed claims 15 and 16, the materials treated in these processes may comprise a rod or bar, and not necessarily the 10" X 10" blocks referred to by Appellant. Therefore, the examiner considers the secondary references to have been properly combined with the '885 claims in the context of an infrared heat treatment process.

For at least the above reasons, it is believed that the appealed claims were properly rejected under the judicially created doctrine of obviousness-type double patenting as being

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unpatentable over the claims of the '885 patent, alone or in view of certain secondary references, and affirmation thereof is solicited.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER

GPW  
July 8, 2003

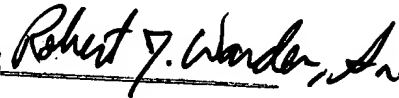
ROY KING   
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

Conferees  
Roy V. King

Robert J. Warden

APPEAL CONFEEE

APPEAL CONFEEE



JAMES G. STAPLES ESQ  
A. FINKL & SONS CO  
2011 NORTH SOUTHPORT AVENUE  
CHICAGO, IL 60614